REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

I. Claim Status

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Claims 12 are amended without prejudice or disclaimer. Support for amendments to claim 12 can be found in page 15, lines 6-12 of the Specification. Withdrawn claims 28-29 are amended, without prejudice or disclaimer, to recite all limitations of claim 12. No new matter is added.

After amending the claims as set forth above, claims 12-14, 18, and 35 are now pending for examination. Claims 19, 28-29 and 32 remain withdrawn. Claims 1-11, 15-17, 20-27, 30-31 and 33-34 are cancelled.

II. Claim Rejections under 35 U.S. C. § 112

Claims 9, 10 and 12 are rejected under 35 U.S.C. § 112, first paragraph. Claims 9, 10 and 33 are rejected under 35 U.S.C. § 112, second paragraph.

Claim 12 is amended without prejudice or disclaimer to overcome the rejections. Claims 9, 10 and 33 are cancelled without prejudice or disclaimer. By way of the Reply, the section 112 rejections are now moot.

III. Claim Rejections under 35 U.S. C. § 103

Claims 9-14, 18, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herchen (US 5,819,434), in view of Nguyen (US 6,565,661).

Applicants do not concede that any of the rejections are proper. Solely in the interest of expedition, claim 9-11 and 33 are cancelled without prejudice or disclaimer.

The independent claim 12 is amended to recite that "the number y of gas ejection holes per unit area is given by a quadratic curve of a distance x from a center of the shower plate, and the quadratic curve is $y = 0.0173x^2 + 5.3574x + 71.517$."

Applicants respectfully submit that both Herchen and Nguyen are silent regarding the above features of claim 12.

Furthermore, as explained in the specification, the claimed features provides superior performance. Specifically, as shown in Figure 6, the non-limiting example having the claimed features results in 0.23% uniformity, which is significantly superior than the 2.9% uniformity of the conventional shower plat (see Specification, Page 15, Lines 13-18).

Thus, Applicants respectfully submit that Herchen and Nguyen, either alone or in combination, fail to disclose "the number y of gas ejection holes per unit area is given by a quadratic curve of a distance x from a center of the shower plate, and the quadratic curve is $y = 0.0173x^2 + 5.3574x + 71.517$," as recited in claim 12.

Claims 13-14, 18, and 35 depend from claim 12, and thus are patentable for at least the same reasons.

For at least the above reasons, Applicants respectfully request withdrawal of the section 103 rejections.

IV. Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment,

to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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